

ANCHUSA IN NEW ENGLAND.

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THE genus *Anchusa* is not included in any of the floras covering New England although it has been known locally for twenty years. *A. officinalis* L. was collected by Prof. J. F. Collins at Providence, Rhode Island, July 2, 1895. On October 8, 1897, Mr. Sidney Harris secured it on waste ground bordering the Fens, Boston; and September 20, 1899, Judge Churchill collected it on a "dump" at the beach at Fairfield, Connecticut. These three collections were referred to *Lycopsis arvensis* L., a plant which closely simulates, in aspect, *A. officinalis*. In RHODORA, iii. 214 (1901) Mr. Edward B. Chamberlain mentions the specimen from Providence under its correct name, and in the same publication [x. 154 (1908)], Mr. William P. Rich, in an entertaining article on "City Botanizing," in which he bases his observations on plants growing wild in Boston, records *A. officinalis* as occurring "on several gravelly banks in August and September." He indicates that he mistook it for *Lycopsis arvensis* L., and is indebted to Dr. E. H. Eames for the correct determination. The genera *Anchusa* and *Lycopsis* are, indeed, very closely related and some of the more recent European botanists have united them. Men who have treated the group monographically, however (and these include some of the greater botanical students) without exception maintain both genera. *Anchusa* as so far represented in America, at least, may be distinguished from *Lycopsis* (in addition to the straight corolla) by the character of a flat receptacle; the nutlets of *L. arvensis* are attached to a more or less elevated gynobase.

The following specimens, cited from the Gray Herbarium (Gr.) and the Herbarium of the New England Botanical Club (N. E.), seem to indicate that the plant is locally well established, particularly at Boston and at Fairfield, Connecticut. However, the fact that no additional stations are given for its occurrence in "The Flowering Plants and Ferns of Connecticut" 329 (1910), would lead one to believe that it is not inclined to spread rapidly, since, as observed above, Judge Churchill found it at Fairbanks as early as 1899.—MASSACHUSETTS: Back Bay region, Boston, Oct. 8, 1897, *Sidney Harris* (N. E.); Sept. 15, 1901, *W. P. Rich* (Gr.); June 23, 1903,

E. F. Williams (Gr.); Oct. 9, 1906, *A. S. Pease* (N. E.); June 24, 1908, *C. H. Knowlton* (Gr. & N. E.). RHODE ISLAND: "north cove lands," Providence, July 2, 1895, *J. F. Collins* (N. E.). CONNECTICUT: "Dump" on the Beach, Fairfield, Sept. 20, 1899, *J. R. Churchill* (N. E. & Gr.); Aug. 17, 1900, *E. H. Eames* (N. E.) and July 8, 1907 (N. E.).

Another plant, very closely related to *A. officinalis*, was collected Sept. 7, 1903, by Dr. O. W. Knight on a railroad embankment at Bangor, Maine, and in RHODORA, vi. 91 (1904) he mentions this collection. Two years later Dr. Knight (l. c. viii. 72) wrote that the plant, "though not spreading seems to hold forth where first found by us." No later report seems to have been published, but if one may judge from *A. officinalis* L., there is little doubt about the plant becoming established. Therefore it seems advisable to call attention to the relationship of the two introductions. The Maine specimen was reported (l. c.) as *A. arvalis* Reichenb. This species has often either been reduced to *A. officinalis*, or ignored by makers of European manuals. However, Schinz & Thellung in Naturf. Ges. Zürich, liii. Heft. iv. 557 (1909), have treated Reichenbach's plant as a variety of *A. officinalis*, identifying it with *A. angustifolia* of Linnaeus. According to this disposition its name is *A. officinalis* L. var. *angustifolia* (L.) A. DC. Rouy, in Rouy & Foucaud's Flore de France, x. 288 (1908), also regarded *A. arvalis* as only a variety of *A. officinalis*, but he used Reichenbach's name varietally and referred *A. angustifolia* L. to another species. Schinz & Thellung, however, on the testimony of Rob. N. Rudmose Brown, who is monographing the genus, show that the identity of *A. angustifolia* L. Sp. Pl. 133 (1753) is with Reichenbach's species.

It seems to me that this disposition is justifiable. At least our European material shows that many intergrades occur between the two forms. The variety, typically, has a looser inflorescence, even the later flowers becoming remote in fruit, the leaves are more or less distinctly denticulate, and the calyx-divisions are less connivent over the fruit. The correct name, then, for the plant introduced at Bangor, Maine, is *Anchusa officinalis* L., var. *angustifolia* (L.) A. DC.

GRAY HERBARIUM.